

Notice of Allowability

Application No.

09/862,440

Examiner

Abdulahkim Nobahar

Applicant(s)

TAKAGI ET AL.

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/14/2006.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Michael E. Monaco, Registration No. 52,041, on September 1, 2006.

The application has been amended as follows:

Replace the claims 10, 20 and 22, filed on June 14, 2006 with the following claims:

Claim 10: The gateway device of claim 1 further comprising:

an authentication information attaching unit configured to attach authentication information to the received first packet to be transmitted from the gateway device by utilizing the information regarding the security association; and

the data transmitting unit configured to transmit the received first packet with the authentication information to the destination device.

Claim 20: The method of claim 19 further comprising:

attaching authentication information to the received first packet to be transmitted from the gateway device by utilizing the information regarding the security association; and
transmitting the received first packet with the authentication information to the destination device.

Claim 22: The computer usable medium of claim 21, the computer readable program codes further including:

a seventh computer readable program code for causing said computer to attach authentication information to the received first packet to be transmitted from the gateway device by utilizing the information regarding the security association; and

an eighth computer readable program code for causing said computer to transmit the received first packet with the authentication information to the destination device.

Allowable Subject Matter

1. Claims 1-23 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The primary reasons for the allowance of the independent claims 1, 19, 21 and 23 are the inclusion of the following limitations that are not found in the prior art and they are uniquely distinct features. The closest prior art is Caronni (6,507,908 B1) and Inoue et al (6,170,057 B1). Caronni discloses a secure system for transferring packets between a mobile terminal and a host terminal located in a network via a gateway. Caronni further discloses a gateway that forwards the data packets on to higher network layers includes a packet analysis device, which monitors the addresses of inbound and outbound packets to a mobile machine outside of a secure network having a security association. Inoue discloses a method for encryption and authentication of packets

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transmitted to and from a mobile terminal to another computer in a computer network. Inoue further discloses a gateway with a data packet relaying function based on the encryption information that decrypts the received encrypted data packets from a device coupled to a network and re-encrypts the same data packets before transmitting to another device coupled to a different network.

However, these two arts, singularly or in combination, fail to anticipate or render the following limitation:

“Claim 1: a data decryption unit configured to decrypt the encrypted packet to obtain a second packet including a second header and data by utilizing the information regarding the security association and to check the second header;

a packet relay unit configured to carry out the packet relaying at the transport or upper layer according to the second header;

a data encryption unit configured to encrypt the second packet to obtain an encrypted second packet by utilizing the information regarding the security association, no header being newly attached to the encrypted second packet; and

a data transmitting unit configured to transmit the encrypted second packet with attaching the first header to the destination device.”

“Claim 19: decrypting the encrypted packet to obtain a second packet including a second header and data by utilizing the information regarding the security association and checking the second header;

carrying out the packet relaying at the transport or upper layer according to the second header;

encrypting the second packet to obtain an encrypted second packet by utilizing the information regarding the security association, no header being newly attached to the encrypted second packet; and

transmitting the encrypted second packet with attaching the first header to the destination device.”

“Claim 21: a third computer readable program code for causing said computer to decrypt the encrypted packet to obtain a second packet including a second header and data by utilizing the information regarding the security association and to check the second header;

a fourth computer readable program code for causing said computer to carry out the packet relaying at the transport or upper layer according to the second header;

a fifth computer readable program code for causing said computer to encrypt the second packet to obtain an encrypted second packet by utilizing the information regarding the security association, no header being newly attached to the encrypted second packet; and

a sixth computer readable program code for causing said computer to transmit the encrypted second packet with attaching the first header to the destination device.”

"Claim 23: a data decryption unit configured to decrypt the encrypted packet to obtain a second packet including a second header and data by utilizing the information regarding the security association and to check the second header;

a packet relay unit configured to carry out the packet relaying at the transport or upper layer according to the second header;

a data encryption unit configured to receive the second packet directly from the decryption unit and encrypt the second packet to obtain an encrypted second packet by utilizing the information regarding the security association; and

a data transmitting unit configured to transmit the encrypted second packet with attaching the first header to the destination device."

3. The dependent claims 2-18, 20 and 22, and are allowed because they were originally found to include a unique feature not found in the closest abovementioned art.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdulhakim Nobahar whose telephone number is 571-272-3808. The examiner can normally be reached on M-T 8-6.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdulhakim Nobahar
Examiner
Art Unit 2132 *a.n.*

September 1, 2006


GILBERTO BARRON JR.
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